Author Index

VOLUME 22

BESANT, C. B.: see Rickard, I. C., 141

BRYANT, W. M. D.: Dispersion of the optical indicatrix as a key identifying characteristic for small particles, 181

CALLAWAY, S.: see Wilkinson, M. C., 229

CLANCY, W. P.: A limited crystallographic and optical characterization of alpha and beta silicon nitride, 279

COX, Mary E.: Holographic microscope–A reassessment, 361

CRUTTWELL, I. A.: Pattern recognition by automatic image analysis, 27

CUNNINGHAM, C. R.: see White, G. W., 267

DIAMOND, J. A.: Contamination control in the pharmaceutical industry, 209

DUBOIS, R. J.: see Kohlbeck, J. A., 169

EINS, S.: Automatic image analysis in the medical and biological sciences, 59

ELLIS, Ruth: see Wilkinson, M. C., 229

EVANS, J. S.: see Foster, R. H., 323

FOSTER, R. H., *et al.*: The measurement of soil microstructure, 323

GAVRILOVIC, J.: Common errors in subnanogram particle x-ray analysis, 221

HASSON, R.: An improved orientation dependent chemical anodizing color reagent for molybdenum, 317

HINDS, D.: An OTF enhancement scheme for optical scanning microscopy, 151

HOUGARDY, H. P.: Instrumentation in automatic image analysis, 5

HUMPHREYS, C. J.: Recent applications of high voltage electron microscopy in various branches of science, 129

JARVIS, R. A.: Computer controlled scanning optical microscope, 247

JESSE, A.: A review of automatic image analysis, 1

JESSE, A.: Information sources in automatic image analysis, 81

JESSE, A.: Bibliography on automatic image analysis, 89

KOHLBECK, J. A., *et al.*: Twinning of β-cyclotetramethylenetetranitramine (HMX), 169

KORDAN, H. A.: Durability of an aceto-orcein fast green stain mixture, 219

LYKOS, T.: see Rickard, I. C., 141

MORROW, S. I.: Catalytic study of lead salicylate modified nitrocellulose, 341

MORROW, S. L.: Microscopical comparison of the condensed phase behavior of nitrocellulose having different degrees of nitration, 349

NAZARÉ, S., *et al.*: Automatic image analysis in materials science, 39

ONDRACEK, G.: see Nazaré, S., 39

RICKARD, I. C., *et al.*: The quantitative detection of alpha particles in certain dielectric materials, 141

SCHINDL, K. P.: The Reichert Univar–A new concept in microscopy, 117

STEVENS, R. E.: Squaric acid: A novel reagent in chemical microscopy, 163

TRUCH, E. R.: see Rickard, I. C., 141

UNDERWOOD, E. E.: Stereology in automatic image analysis, 69

WALLACE, A.: A new approach to the scanning electron microscope, 259

WATTS, J. T.: Technical writing and translating for microscopists, 213

WHITE, G. W., *et al.*: A micromixer for solid-liquid mixing studies, 267

WILKINSON, M. C., *et al.*: Evaluation of the use of the Quantimet 720 in the determination of the size distributions of monodisperse latices, 229

WILSON, D. S.: Microscopical identification of pulverised fuel ash, 159

Subject Index

VOLUME 22

Aceto-orcein fast green stain, 219
Alpha particles, quantitative detection, 129
Automatic image analysis, see Image analysis

Bibliography on automatic image analysis, 89
Biological science, automatic image analysis, 59

Chemical microscopy, use of squaric acid, 163
Color reagent for molybdenum, 317
Computer controlled scanning optical microscope, 247
Contamination control in the pharmaceutical industry, 209
Crystallography,
  cyclotetramethylene-tetranitramine, 169
  silicon nitride, 279
Cyclotetramethylene-tetranitramine, 169

Dispersion of the optical indicatrix as a key identifying characteristic for small particles, 181

Electron microprobe, errors in sub-nanogram x-ray analysis, 221
Electron microscopy,
  applications, 129
  high voltage, 129
  scanning, a new approach, 259

Flash device for photomicrography, 361

High voltage electron microscopy, 129
Holographic microscopy, a reassessment, 361
Hot stage microscopy, decomposition of nitrocellulose, 341, 349

Image analysis,
  automatic, 1
  bibliography, 89
  biological sciences, 59
  information sources, 81
  instrumentation, 5
  materials science, 39
  measurement of soil microstructure, 323
  medical and biological sciences, 59
  pattern recognition, 27
  Quantimet 720 in the determination of the size distributions of monodisperse latices, 229
  quantitative detection of alpha particles, 129
  review, 1
  soil microstructure, 323
  stereology, 69
Information sources in automatic image analysis, 81
Instrumentation in automatic image analysis, 5

Materials science, automatic image analysis, 39
Medical and biological sciences, automatic image analysis, 59
Micromixing, solid-liquid studies, 267
Microscopical identification of pulverised fuel fly ash, 159
Molybdenum, a color reagent, 317

Nitrocellulose, thermal studies, 341, 349

Optical indicatrix as a key identifying characteristic for small particles, 181
Optical scanning microscopy, computer controlled, 247
OTF enhancement scheme, 151
OTF enhancement scheme for optical scanning microscopy, 151

Particle identification, dispersion of the optical indicatrix as a key identifying characteristic, 181
pulversied fuel fly ash, 159
sub-nanogram particle x-ray analysis, 221
Particle size distribution using the Quantimet 720, 229
Pattern recognition by automatic image analysis, 27
Pharmaceutical industry, contamination control, 209

Quantimet 720 in the determination of the size distributions of monodisperse latices, 229

Reichert Univar, 117

Scanning electron microscopy, a new approach, 259
Scanning microscopy, computer controlled, 247
OTF enhancement scheme, 151
Silicon nitride, crystallographic properties, 279
Soil microstructure measurement by automatic image analysis, 323
Solid-liquid micromixing studies, 267
Squaric acid, a novel reagent for chemical microscopy, 163
Stain, aceto-orcein fast green, 219
Stereology in automatic image analysis, 69

Technical writing and translating for microscopists, 213
Track counting, quantitative detection of alpha particles, 129
Twinning of β-cyclotetramethylenetetranitramine (HMX), 169

Univar, new microscope, 117

X-ray analysis, sub-nanogram particle identification, 221